CLAIMS:

1.   A method comprising:

managing state information within a primary control unit; and

communicating changes to the state information to a standby control unit prior to communicating the changes to a consumer of the state information.

2.   The method of claim 1, wherein communicating changes to the state information to a standby control unit comprises communicating changes to the state in accordance with an order that requires the changes to be communicated to the standby control unit prior to communicating the changes to the consumer of the state information.

3.   The method of claim 1,

wherein managing state information comprises managing state information within a temporally-ordered data structure, and

wherein communicating changes to the standby control unit comprises replicating the temporally-ordered data structure within the standby control unit.

4   The method of claim 3, wherein communicating changes comprises communicating changes to the state information to the consumers in accordance with the data structure.

5.   The method of claim 3, wherein managing state information comprises utilizing a commit proposal and a commit marker to identify a portion of the state information.

6.   The method of claim 5, wherein utilizing a commit proposal and a commit marker comprises:

setting the commit proposal to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer; and

setting the commit marker to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer and for which an acknowledgement has been received from the consumer.

7.   The method of claim 6, further comprising setting a flag that indicates to the consumer that the commit proposal has been set.

8.   The method of claim 6, further comprising resetting the commit marker to the object identified by the commit proposal in response to receiving the acknowledgement.

9.   The method of claim 5, further comprising:

replicating the commit proposal and the commit marker to the standby control unit; and

communicating a portion of the replicated temporally-ordered data structure that is bounded by the replicated commit proposal and the replicated commit marker to the consumer from the standby control unit in the event the primary control unit fails.

10.   The method of claim 9, further comprising issuing a communication from the primary control unit to cause the standby control unit to set the replicated commit proposal to identify a most recent object of the replicated temporally-ordered data structure that has not been acknowledged by the consumer.

11.   The method of claim 10, further comprising issuing a communication from the primary control unit to cause the standby control unit to set the replicated commit marker to identify a most recent object of the replicated temporally-ordered data structure that has been communicated to the consumer and for which an acknowledgement has been received from the consumer.

12.   The method of claim 11, wherein issuing the communication to cause the standby control unit to set the replicated commit marker further causes the standby control unit to set the replicated commit marker to the object identified by the replicated commit proposal in response to receiving the acknowledgement.

13.   The method of claim 5, wherein utilizing a commit marker and commit proposal further comprises deleting a least recent object of the temporally-ordered data structure that is not bounded by the commit marker and the commit proposal.

14.   The method of claim 1, wherein managing state information comprises storing the state information within a set of objects.

15.   The method of claim 14, further comprising:

receiving event messages indicating changes to the state information; and

linking the objects of the data structure in accordance with an order in which the event messages are received to form a temporally-ordered data structure.

16.   A method comprising:

maintaining state information within a temporally-ordered data structure;

communicating a portion of the state information to a consumer; and

encoding a commit proposal and a commit marker within the temporally-ordered data structure to identify the portion of the state information communicated to the consumer.

17.   The method of claim 16, wherein the data structure comprises a plurality of objects, and wherein maintaining state information comprises storing the state information within the objects.

18.   The method of claim 17, further comprising:

setting the commit proposal to identify a most recent one of the objects communicated to the consumer; and

setting the commit marker to identify a most recent one of the objects communicated to the consumer for which an acknowledgement has been received from the consumer.

19.   The method of claim 18, further comprising setting a flag that indicates to the consumer that the commit proposal has been set.

20.   The method of claim 18, further comprising:

receiving an update request from the consumer;

identifying a second portion of the temporally-ordered data structure that contains objects more recent than the object identified by the commit proposal; and

communicating state data associated with the second portion of the temporally-ordered data structure to the consumer in response to the request.

21.   The method of claim 20, further comprising updating the commit proposal to identify the most recent of the identified objects of the temporally-ordered data structure.

22.   The method of claim 21, further comprising:

receiving an acknowledgement from the consumer; and

updating the commit marker to identify the object identified by the commit proposal in response to the acknowledgement.

23.   The method of claim 17, further comprising communicating changes to the state information to a standby control unit before communicating the changes to the consumer.

24.   The method of claim 23, wherein communicating changes to the state information to a standby control unit comprises communicating changes to the state in accordance with an order that requires the changes to be communicated to the standby control unit.

25.   The method of claim 23, further comprising:

receiving event messages indicating changes to the state information; and

linking the objects of the data structure in accordance with an order in which the event messages are received.

26.   A system comprising:

a primary control unit;

a standby control unit; and

a consumer, wherein the primary control unit manages state information and communicates changes to the state information to the standby control unit before communicating the changes to the consumer.

27.   The system of claim 26, wherein communicating changes to the state information to a standby control unit comprises communicating changes to the state in accordance with an order that requires the changes to be communicated to the standby control unit prior to communicating the changes to the consumer.

28.   The system of claim 26, wherein the primary control unit manages the state information within a temporally-ordered data structure and communicates state changes by replicating the temporally-ordered data structure within the standby control unit.

29.   The system of claim 28, wherein the primary control unit communicate changes to the state information to the consumer in accordance with the temporally-ordered data structure.

30.   The system of claim 28, wherein the primary control unit utilizes a commit proposal and a commit marker to identify a portion of the state information.

31.   The system of claim 30, wherein the commit proposal and the commit marker identify the portion of the state information within the data structure that has been communicated to the consumer.

32.   The system of claim 30, wherein the primary control unit sets the commit proposal to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer, and sets the commit marker to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer and for which an acknowledgement has been received from the consumer.

33. The system of claim 32, wherein the primary control unit sets a flag that indicates to the consumer that the commit proposal has been set.

34. The system of claim 32, wherein the primary control unit further sets the commit marker to the object identified by the commit proposal in response to receiving the acknowledgement.

35. The system of claim 30, wherein the primary control unit replicates the commit proposal and the commit marker to the standby control unit and communicates a portion of the replicated temporally-ordered data structure that is bounded by the commit proposal and the commit marker to the consumer from the standby control unit in the event the primary control unit fails.

36. The system of claim 35, wherein the primary control unit issues a communication that causes the standby control unit to set the replicated commit proposal to identify a most recent object of the temporally-ordered replicated data structure that has not been acknowledged by the consumer.

37. The system of claim 36, wherein the primary control unit issues a communication that causes the standby control unit to set the replicated commit marker to identify a most recent object of the temporally-ordered replicated data structure that has been communicated to the consumer and for which an acknowledgement has been received from the consumer.

38. The system of claim 37, wherein the communication that causes the standby control unit to set the replicated commit marker further causes the standby control unit to set the replicated commit marker to the object identified by the replicated commit proposal in response to receiving the acknowledgement.

39.	The system of claim 30, wherein the primary control unit utilizes the commit marker and the commit proposal to delete a least recent object of the temporally ordered data structure that does not include the commit marker and the commit proposal.

40.	The system of claim 28, wherein the primary control unit receives event messages indicating changes to the state information, and links objects of the data structure in accordance with an order in which the event messages are received to form the temporally-ordered data structure.

41.	The system of claim 26, wherein the primary control unit manages state information by storing the state information within a set of objects.

42.	A system comprising:

a consumer;

a memory to store state information; and

a control unit to maintain the state information within a temporally-ordered data structure, wherein the control unit communicates a portion of the state information to the consumer, and encodes a commit proposal and a commit marker within the data structure to identify the portion of the state information within the temporally-ordered data structure.

43.	The system of claim 42, wherein the control unit sets the commit proposal to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer, and sets the commit marker to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer and for which an acknowledgement has been received from the consumer.

44.	The system of claim 43, wherein the control unit sets a flag that indicates to the consumer that the commit proposal has been set.

45. The system of claim 43, wherein the control unit receives an update request from the consumer, identifies a portion of the temporally-ordered data structure that contains objects more recent that the object identified by the commit proposal, and communicates state data for the identified objects to the consumer in response to the request.

46. The system of claim 45, wherein the control unit updates the commit proposal to identify the most recent of the identified objects of the temporally-ordered data structure.

47. The system of claim 46, wherein the control unit receives an acknowledgement from the consumer and updates the commit marker to identify the object identified by the commit proposal in response to the acknowledgement.

48. The system of claim 42, wherein the control unit is a primary control unit, and the system further comprises a standby control unit, wherein the primary control unit communicates changes to the state information in accordance with an order that requires the changes to be communicated to the stand control unit before communicating the changes to the consumer.

49. The system of claim 42, wherein the data structure comprises a plurality of objects, and the control unit manages the state information by storing the state information within the objects.

50. The system of claim 49, wherein the control unit further receives event messages indicating changes to the state information and links the objects of the data structure in accordance with an order in which the event messages are received.

51.   A computer-readable medium comprising instructions for causing a primary control unit to:

manage state information stored within the primary control unit; and

communicate changes to the state information in accordance with an order that requires the changes to be communicated to a standby control unit before communicating the changes to a consumer of the state information.

52.   The computer-readable medium of claim 51, wherein the instructions cause the primary control unit to:

manage state information within a temporally-ordered data structure, and

communicate changes by replicating the temporally-ordered data structure within the standby control unit.

53.   The computer-readable medium of claim 52, wherein the instructions cause the primary control unit to manage state information by utilizing a commit proposal and a commit marker to identify a portion of the state information within the data structure that has been communicated to the consumer.

54.   The computer-readable medium of claim 53, wherein the instructions cause the primary control unit to:

set the commit proposal to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer; and

set the commit marker to identify a most recent object of the temporally-ordered data structure that has been communicated to the consumer and for which an acknowledgment has been received from the consumer.

55.   The computer-readable medium of claim 55, further comprising instructions to cause the primary control unit to replicate the commit proposal and the commit marker to the standby control unit.